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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,437	07/11/2001	Hironobu Kiyomoto	15115/005001	8917
22511	7590	10/12/2005	EXAMINER	
OSHA LIANG L.L.P. 1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010			LUU, THANH X	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

09/903,437

Applicant(s)

KIYOMOTO ET AL.

Examiner

Thanh X. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 16, 25 and 38-42 is/are pending in the application.
- 4a) Of the above claim(s) 41 and 42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 25 and 38-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 41 and 42 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims are directed to a different species.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 41 and 42 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 16, 25 and 38-40 are addressed below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Siedentopf (U.S. Patent 929,795).

Regarding claim 16, Siedentopf discloses (see Fig.) an optical component (e) comprising: a transparent body having a direction emission region (at d), a total reflection region (see beam 3) disposed around the direct emission region, and a curved reflective surface (at e⁰) which faces the direction emission region and the total

reflection region; a recess (not labeled) provided on the curved reflective surface, wherein the thickness of the transparent body is smaller than a diameter of an outer edge of the curved reflective surface, wherein a length between a center of the direct emission region and a boundary between the direct emission region and the total reflection region is smaller than a length between the boundary and the outer edge of the curved reflective surface, wherein the curved reflective surface except for the recess is covered with a high reflective material (e^0), wherein the direction emission region passes incident light directly passing through the recess and wherein the curved reflective surface indirectly receives light passing through the recess and the total reflection region reflects incident light directly passing through the recess and passes the light reflected by the curved reflective surface through the total reflection region. Examiner notes that since the shape and structure of the optical element of Siedentopf is the same as Applicant's claimed invention (see Fig. 46) incident light from the recess side behaves as claimed.

4. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Polanyi et al. (U.S. Patent 2,683,394).

Regarding claim 16, Polanyi et al. disclose (see Fig. 4) an optical component comprising: a transparent body (58) having a direction emission region (center region), a total reflection region (outer region) disposed around the direct emission region, and a curved reflective surface (65) which faces the direction emission region and the total reflection region; a recess (at 73) provided on the curved reflective surface, wherein the thickness of the transparent body is smaller than a diameter of an outer edge of the

curved reflective surface, wherein a length between a center of the direct emission region and a boundary between the direct emission region and the total reflection region is smaller than a length between the boundary and the outer edge of the curved reflective surface, wherein the curved reflective surface except for the recess is covered with a high reflective material (see col. 4, line 60), wherein the direction emission region passes incident light directly passing through the recess and wherein the curved reflective surface indirectly receives light passing through the recess and the total reflection region reflects incident light directly passing through the recess and passes the light reflected by the curved reflective surface through the total reflection region.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 25 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polanyi et al. in view of Perissinotto et al. (U.S. Patent 5,485,317).

Regarding claims 25 and 39, Polanyi et al. disclose the claimed invention as set forth above. Polanyi et al. further disclose (see Fig. 4) a light emitting element (74) disposed in the recess. Polanyi et al. do not specifically disclose a transparent resin as claimed. Perissinotto et al. teach (see Figs. 2 and 3) a transparent resin (in recess 21) as claimed and a plurality of components. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a resin and a

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plurality of components in the apparatus of Harris in view of Perissinotto et al. to properly fix the light emitting element and to provide brighter illumination.

7. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Polanyi et al. in view of Godbillion et al. (U.S. Patent 6,264,347).

Regarding claim 38, Polanyi et al. disclose the claimed invention as set forth above. Polanyi et al. do not specifically disclose a fresnel lens shaped pattern as claimed. Godbillion et al. teach (see Fig. 4) a fresnel lens pattern is formed on a curved reflective surface in a similar device. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a fresnel lens pattern in the apparatus of Polanyi et al. in view of Godbillion et al. to obtain a desired pattern of illumination.

8. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Polanyi et al.

Regarding claim 40, Polanyi et al. disclose the claimed invention as set forth above. Harris does not specifically a circuit board as claimed. However, it is notoriously well known in the art to mount light emitting elements on circuit boards for connection to other circuitry or to a power source. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a circuit board the apparatus of Polanyi et al. to properly mount and power the device.

Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'Thanh X. Luu', written in a cursive style.

Thanh X Luu
Primary Examiner
Art Unit 2878

09/2005